

CLAIMS

What is claimed is:

- 1 1. An anchoring system, comprising:
2 a housing comprising a distal region, a proximal region and an interior
3 region;
4 a connector attached to the housing, wherein said connector connects the
5 housing to an object;
6 at least one motor which is contained within and fixed to said housing,
7 wherein said at least one motor is operably linked to at least one power
8 source;
9 at least three movable elongated members, each member comprising a
10 proximal tip and a distal tip and having a retracted storage position and
11 an extended operative position relative to the housing, wherein each
12 elongated member is operably linked to at least one motor, and wherein
13 said elongated member extends away from the distal surface of said
14 housing into a penetrable environment when the elongated member is in
15 an extended operative position.
- 1 2. An anchoring system according to claim 1, wherein the elongated members
2 are shaped like screws.
- 1 3. An anchoring system according to claim 1, wherein said elongated
2 members are telescoping screws having multiple layers, wherein an inner layer
3 extends beyond an immediately surrounding outer layer when a telescoping screw
4 is deployed into an extended operative position, and wherein an inner layer
5 retracts into an immediately surrounding layer when a telescoping screw is in a
6 storage position.
- 1 4. An anchoring system according to claim 1, comprising a number of
2 elongated members selected from the group of numbers that consists of three, four,

3 five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen,
4 seventeen, eighteen, nineteen, and twenty.

1 5. An anchoring system according to claim 1, comprising a number of motors
2 that is equal to the number of elongated members, wherein each motor is operably
3 linked to a power source and to an elongated member and the motor causes the
4 linked elongated member to move from a retracted storage position to an extended
5 operative position and from an extended operative position to a storage position.

1 6. An anchoring system according to claim 1, wherein said power source is
2 contained within said housing.

1 7. An anchoring system according to claim 1, wherein said power source is
2 remote and the power source is operably linked to said at least one motor via a
3 power line.

1 8. An anchoring system according to claim 1, wherein the distal tip of an
2 elongated member further comprises a region in which the thread angle, thread
3 height, thread pitch, pitch diameter, threads per inch, thread lead, and thread lead
4 angle are varied to facilitate penetration into a sandy or muddy penetrable
5 medium.

1 9. An anchoring system according to claim 1, further comprising at least one
2 camera.

1 10. A method of anchoring an object, comprising the steps of:

2 (a) positioning an anchor against a penetrable medium, wherein said anchor
3 comprises:
4 a housing having a distal surface region, a proximal surface region and
5 an interior region;
6 a connector attached to the housing, wherein said connector connects
7 the housing of the anchor to an object;
8 at least one motor which is contained within and fixed to said housing,
9 wherein said at least one motor is operably linked to at least one
10 power source;

11 at least three movable elongated members wherein each elongated
12 member is operably linked to at least one motor, each elongated
13 member comprising a proximal tip and a distal tip and having a
14 retracted storage position and an extended operative position relative
15 to the housing, wherein an elongated member extends away from the
16 distal surface of said housing into a penetrable environment when
17 the elongated member is in an extended operative position,

18 (b) causing said at least one motor to move an operably linked elongated
19 member from a storage position to an extended operative position in
20 which each elongated member extends from said housing into said
21 penetrable medium.

1 11. A method according to claim 10, wherein said elongated members are
2 shaped like screws.

1 12. A method according to claim 10, wherein said elongated members are
2 telescoping screws having multiple layers, wherein said at least one motor causes
3 an inner layer to extend beyond an immediately surrounding layer or to retract into
4 an immediately surrounding layer.

1 13. A method according to claim 10, wherein the anchor comprises a number
2 of elongated members selected from the group of numbers that consists of three,
3 four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen,
4 sixteen, seventeen, eighteen, nineteen, and twenty.

1 14. A method according to claim 10, wherein the anchor comprises a number
2 of motors that is equal to the number of elongated members, wherein each motor
3 is operably linked to an elongated member and causes said linked elongated
4 member to move from a storage position to an extended operative position and
5 from an extended operative position to a storage position.

1 15. A method according to claim 10, wherein said method further comprises
2 causing said at least one motor to move each operably linked elongated member
3 from an extended operative position to a retracted storage position.

1 16. A method according to claim 10, wherein the anchor further comprises a
2 camera, and the method further comprises using the camera to monitor and direct
3 positioning of the anchor relative to the penetrable medium.